Optics Communications 85 (1991) 538–545
North-Holland

OPTICS
COMMUNICATIONS

Author Index to Volume 85

Abraham, N.B. and D.E. Chyba, The frequency of the emission from a laser when it is below threshold 85 (1991) 83
Abraham, N.B., see S. Balle 85 (1991) 104
Agarwal, G.S., R.K. Bullough and N. Nayak, Probing the dressed states of an atom interacting with a quantized field 85 (1991) 202
Akulshin, A.M., A.A. Celikov, V.A. Sautenkov, T.A. Vartanian and V.L. Velichansky, Intensity and concentration dependence of Doppler-free resonance in selective reflection 85 (1991) 21
Amitai, Y., see H.M. Ozaktas 85 (1991) 1
Aramaki, S., W. Torruellas, R. Zanoni and G.I. Stegeman, Tunable third harmonic genereation of trans-β-carotene 85 (1991) 527
Arsenault, H.H., see L. Leclerc 85 (1991) 299

Bajer, J. and J. Peřina, Quantum statistical properties of optical phase conjugation 85 (1991) 261
Balle, S., F. De Pasquale, M. San Miguel and N.B. Abraham, Intensity statistics and spatial correlation functions in a noise-driven unidirectional laser amplifier 85 (1991) 104
Bandy, D.K., see A.N. Oraevsky 85 (1991) 360
Banerjee, P.P., see C.-W. Tarn 85 (1991) 481
Baranova, N.B., A.N. Chudinov and B.Ya. Zel'dovich, Reply to comments on "Polar asymmetry of photoionization by a field with $\langle E^3 \rangle \neq 0$. Theory and experiment" 85 (1991) 371
Barton, J.S., see R. Morgan 85 (1991) 17
Basuray, A., S. Mukhopadhyay, H.K. Ghosh and A.K. Datta, A tristate optical logic system 85 (1991) 167
Bäumler, W. and A. Penzkofer, Measurement of background energy content of a linear cw colliding pulse mode-locked dye laser 85 (1991) 326
Bel'dyugin, I.M., M.V. Zolotarev and I.V. Shinkareva, Phase-locking of optically coupled lasers in the presence of resonant frequency spread and external noise 85 (1991) 338
Ben-Aryeh, Y. and M. Zahler, The effects of the beam splitters on the quantum detection properties of the nonlinear Mach–Zender interferometer 85 (1991) 132
Berkeland, D., see M.G. Boshier 85 (1991) 355
Bertilone, D.C., On the exact Kirchhoff and Rayleigh–Sommerfeld theories for the focusing of an infinite scalar spherical wave-field 85 (1991) 153
Beysens, D., see V. Gurfein 85 (1991) 147
Bhattacharjee, S., see V.J. Menon 85 (1991) 393
Białynicka-Birula, Z., P. Meystre, E. Schumacher and M. Wilkens, Velocity-dependent spontaneous emission 85 (1991) 315
Billmers, R.I., J. Davis and M. Squicciarini, A tunable hole-burning filter for lidar applications 85 (1991) 26
Boshier, M.G., D. Berkeland, E.A. Hinds and V. Sandoghdar, External-cavity frequency-stabilization of visible and infrared semiconductor lasers for high resolution spectroscopy 85 (1991) 355
Bosshard, Ch., M. Flörsheimer, M. Küpfer and P. Günter, Cerenkov-type phase-matched second-harmonic generation in DCANP Langmuir-Blodgett film waveguides 85 (1991) 247
Broers, B., see L.D. Noordam 85 (1991) 331

Optics Communications 85 (1991) 538–545
North-Holland

OPTICS
COMMUNICATIONS

Author Index to Volume 85

Abraham, N.B. and D.E. Chyba, The frequency of the emission from a laser when it is below threshold 85 (1991) 83
Abraham, N.B., see S. Balle 85 (1991) 104
Agarwal, G.S., R.K. Bullough and N. Nayak, Probing the dressed states of an atom interacting with a quantized field 85 (1991) 202
Akulshin, A.M., A.A. Celikov, V.A. Sautenkov, T.A. Vartanian and V.L. Velichansky, Intensity and concentration dependence of Doppler-free resonance in selective reflection 85 (1991) 21
Amitai, Y., see H.M. Ozaktas 85 (1991) 1
Aramaki, S., W. Torruellas, R. Zanoni and G.I. Stegeman, Tunable third harmonic genereation of trans-β-carotene 85 (1991) 527
Arsenault, H.H., see L. Leclerc 85 (1991) 299

Bajer, J. and J. Peřina, Quantum statistical properties of optical phase conjugation 85 (1991) 261
Balle, S., F. De Pasquale, M. San Miguel and N.B. Abraham, Intensity statistics and spatial correlation functions in a noise-driven unidirectional laser amplifier 85 (1991) 104
Bandy, D.K., see A.N. Oraevsky 85 (1991) 360
Banerjee, P.P., see C.-W. Tarn 85 (1991) 481
Baranova, N.B., A.N. Chudinov and B.Ya. Zel'dovich, Reply to comments on "Polar asymmetry of photoionization by a field with $\langle E^3 \rangle \neq 0$. Theory and experiment" 85 (1991) 371
Barton, J.S., see R. Morgan 85 (1991) 17
Basuray, A., S. Mukhopadhyay, H.K. Ghosh and A.K. Datta, A tristate optical logic system 85 (1991) 167
Bäumler, W. and A. Penzkofer, Measurement of background energy content of a linear cw colliding pulse mode-locked dye laser 85 (1991) 326
Bel'dyugin, I.M., M.V. Zolotarev and I.V. Shinkareva, Phase-locking of optically coupled lasers in the presence of resonant frequency spread and external noise 85 (1991) 338
Ben-Aryeh, Y. and M. Zahler, The effects of the beam splitters on the quantum detection properties of the nonlinear Mach–Zender interferometer 85 (1991) 132
Berkeland, D., see M.G. Boshier 85 (1991) 355
Bertilone, D.C., On the exact Kirchhoff and Rayleigh–Sommerfeld theories for the focusing of an infinite scalar spherical wave-field 85 (1991) 153
Beysens, D., see V. Gurfein 85 (1991) 147
Bhattacharjee, S., see V.J. Menon 85 (1991) 393
Białynicka-Birula, Z., P. Meystre, E. Schumacher and M. Wilkens, Velocity-dependent spontaneous emission 85 (1991) 315
Billmers, R.I., J. Davis and M. Squicciarini, A tunable hole-burning filter for lidar applications 85 (1991) 26
Boshier, M.G., D. Berkeland, E.A. Hinds and V. Sandoghdar, External-cavity frequency-stabilization of visible and infrared semiconductor lasers for high resolution spectroscopy 85 (1991) 355
Bosshard, Ch., M. Flörsheimer, M. Küpfer and P. Günter, Cerenkov-type phase-matched second-harmonic generation in DCANP Langmuir-Blodgett film waveguides 85 (1991) 247
Broers, B., see L.D. Noordam 85 (1991) 331

Brussard, M., see P. Laporta 85 (1991) 47
Bullough, R.K., see G.S. Agarwal 85 (1991) 202
Buse, K., L. Holtmann and E. Krätzig, Activation of $BaTiO_3$ for infrared holographic recording 85 (1991) 183
Bužek, V., see H. Moya-Cessa 85 (1991) 267

Camparo, J.C. and P. Lambropoulos, The stochastic realization shift 85 (1991) 213
Celikov, A.A., see A.M. Akulshin 85 (1991) 21
Chen, D.Y., see W.Y. Ma 85 (1991) 408
Chien, P.-Y. and C.-L. Pan, An optical signal generator based on a triangularly phase-modulated interferometer 85 (1991) 385
Chihara, M., see T. Omatsu 85 (1991) 343
Chudinov, A.N., see N.B. Baranova 85 (1991) 371
Chui, S.T., see H. Ma 85 (1991) 437
Chyba, D.E., see N.B. Abraham 85 (1991) 83
Clark, M.M., see A.N. Oraevsky 85 (1991) 360
Cronin-Golomb, M., see J. Khoury 85 (1991) 5

Datta, A.K., see A. Basuray 85 (1991) 167
Dattoli, G., H. Fang, L. Giannessi and A. Torre, A simple analysis of the MOPA FEL Stanford experiment 85 (1991) 425
Davis, C.A., D.R. McKenzie and R.C. McPhedran, Optical properties and microstructure of thin silver films 85 (1991) 70
Davis, J., see R.I. Billmers 85 (1991) 26
Delaporte, P.C., see J.-M. Hueber 85 (1991) 237
Denz, C., G. Pauliat, G. Roosen and T. Tschudi, Volume hologram multiplexing using a deterministic phase encoding method 85 (1991) 171
De Pasquale, F., see S. Balle 85 (1991) 104
Dey, K.K., see V.J. Menon 85 (1991) 393
Doria, A. and G.P. Gallerano, Coupling between free propagating and guided modes in a hybrid resonator for a waveguide free electron laser 85 (1991) 500
Doualan, J.L., see K. Mazighi 85 (1991) 232

El-Hewie, M.F. and A.K. Majumdar, Polarization discrimination of complex surfaces by laser light: theory 85 (1991) 462
Eliseev, V.V., V.T. Tikhonchuk and A.A. Zozulya, One-mirror self-pumped phase conjugator: three-dimensional analysis 85 (1991) 520
Erneux, T. and P. Mandel, Slow passage through the laser first threshold: influence of the initial condition 85 (1991) 43

Fang, H., see G. Dattoli 85 (1991) 425
Flörsheimer, M., see Ch. Bosshard 85 (1991) 247
Fontaine, B.L., see J.-M. Hueber 85 (1991) 237
Forestier, B.M., see J.-M. Hueber 85 (1991) 237
Fu, P., see Z. Yu 85 (1991) 63

Galatola, P., L.A. Lugiato, M.G. Porreca, P. Tombesi and G. Leuchs, System control by variation of the squeezing phase 85 (1991) 95

Gallerano, G.P., see A. Doria 85 (1991) 500
Garrabos, Y., see V. Gurfein 85 (1991) 147
Georges, T., Amplifier noise jitter of two interacting solitons 85 (1991) 195
Ghosh, H.K., see A. Basuray 85 (1991) 167
Giannessi, L., see G. Dattoli 85 (1991) 425
Goodman, J.W., see H.M. Ozaktas 85 (1991) 1
Gorbal, M.R., see J.V. Yenagi 85 (1991) 223
Grattan, K.T.V., see Y.N. Ning 85 (1991) 10
Günter, P., see Ch. Bosshard 85 (1991) 247
Gurfein, V., D. Beysens, Y. Garrabos and B. Le Neindre, Simple grid technique to measure refractive index gradients 85 (1991) 147
Gustafson, S.C., G.R. Little and D.M. Simon, Optical-resonator-based neural network 85 (1991) 311

Hamel, J., see K. Mazighi 85 (1991) 232
Hänsch, T.W., see P.I. Richter 85 (1991) 414
Harper, P.G., see R. Morgan 85 (1991) 17
Hasuo, M., N. Nagasawa and T. Itoh, Measurement of the biexciton level width of CuCl at $k \sim 0$ with a Ti-sapphire ring laser 85 (1991) 219
He, H., see L. Zhao 85 (1991) 453
Herzog, U., Quantum noise of lasers with multi-photon absorption and reduced pump noise 85 (1991) 275
Hinds, E.A., see M.G. Boshier 85 (1991) 355
Holtmann, L., see K. Buse 85 (1991) 183
Hsu, W.Y., see H. Ma 85 (1991) 437
Hu, L., see L. Zhao 85 (1991) 453
Hueber, J.-M., B.L. Fontaine, P.C. Delaporte, B.M. Forestier and M.L. Sentis, Small volume long pulse X-ray preionized XeCl laser with double discharge and fast ferrite magnetic switch 85 (1991) 237

Itoh, M., see T. Omatsu 85 (1991) 343
Itoh, T., see M. Hasuo 85 (1991) 219
Iwasaki, J., see H. Ooki 85 (1991) 177

Jagannath, H. and P. Venkateswarlu, External seeding in double phase conjugate mirror 85 (1991) 443
Jeong, J.-M. and M.E. Marhic, All-optical logic gates based on cross-phase modulation in a nonlinear fiber interferometer 85 (1991) 430
Jiang, Q., see Z. Yu 85 (1991) 63
Jones, D.C. and L. Solymar, Transient response of photorefractive bismuth silicon oxide in the pulsed regime 85 (1991) 372
Jones, J.D.C., see R. Morgan 85 (1991) 17
Joosen, W., see L.D. Noordam 85 (1991) 331
Joseph, J., K. Singh and P.K.C. Pillai, Spatial amplification via photorefractive two-beam coupling: real-time image processing using controllable erasure of Fourier spectrum 85 (1991) 389

Kasowski, R.V., see H. Ma 85 (1991) 437
Khoury, J., V. Ryan, C. Woods and M. Cronin-Golomb, Photorefractive time correlation motion detection 85 (1991) 5
Knight, P.L., see H. Moya-Cessa 85 (1991) 267
Kosachiov, D., B. Matisov and Yu. Rozhdestvensky, Coherent population trapping: sensitivity of an atomic system to the relative phase of exciting fields 85 (1991) 209

Krätzig, E., see K. Buse 85 (1991) 183
Küpfer, M., see Ch. Bosshard 85 (1991) 247
Kuroda, K., see T. Omatsu 85 (1991) 343

Lagendijk, A., see L.D. Noordam 85 (1991) 331
Lambropoulos, P., see J.C. Camparo 85 (1991) 213
Laporta, P. and M. Brussard, Misalignment sensitivity of laser-diode pumped solid-state lasers 85 (1991) 47
Lawandy, N.M., Comments on "Polar asymmetry of photoionization by a field with $\langle E^3 \rangle \neq 0$. Theory and experiment" [N.B. Baranova, A.N. Chudinov and B.Ya. Zel'dovich, Optics Comm. 79 (1990) 116] 85 (1991) 369
Leclerc, L., Y. Sheng and H.H. Arsenault, Circular harmonic covariance filters for rotation invariant object recognition and discrimination 85 (1991) 299
Le Neindre, B., see V. Gurfein 85 (1991) 147
Leuchs, G., see P. Galatola 85 (1991) 95
Li, L.Q., see W.Y. Ma 85 (1991) 408
Li, S. and Y. Zhang, Conditions for operating a lossy nonlinear Fabry-Perot etalon as an optical amplifier 85 (1991) 365
Li, Y., see Y. Zhang 85 (1991) 473
Little, G.R., see S.C. Gustafson 85 (1991) 311
Liu, Y. and J. Ohtsubo, Observation of higher harmonic bifurcations in chaotic system using a laser diode active interferometer 85 (1991) 457
Loh, W.H. and C.L. Tang, Succesive higher-harmonic bifurcations of a polarization self-modulated external cavity 85 (1991) 283
Lu, X., see Z. Yu 85 (1991) 63
Lu, Z., see L. Zhao 85 (1991) 453
Lugiato, L.A., see P. Galatola 85 (1991) 95
Lukosz, W. and P. Pliska, Determination of thickness and refractive index of SiO_2 films on silicon wafers using an Abbe refractometer 85 (1991) 381

Ma, H., S.T. Chui, R.V. Kasowski and W.Y. Hsu, Ab-initio calculation of nonlinear optical properties of GaAs 85 (1991) 437
Ma, W.Y., L.Q. Li, W.Z. Zhao and D.Y. Chen, Ultrasensitive analysis of Ru through autoionization states by a laser 85 (1991) 408
Majumdar, A.K., see M.F. El-Hewie 85 (1991) 462
Mandel, P., see T. Erneux 85 (1991) 43
Margerie, J., see K. Mazighi 85 (1991) 232
Marhic, M.E., see J.-M. Jeong 85 (1991) 430
Martínez-Herrero, R. and P.M. Mejías, Beam characterization through active media 85 (1991) 162
Matisov, B., see D. Kosachiov 85 (1991) 209
Mazighi, K., J.L. Doualan, J. Hamel, J. Margerie, D. Mounier and A. Ostrovsky, Active mode-locked operation of a diode pumped colour-centre laser 85 (1991) 232
McKenzie, D.R., see C.A. Davis 85 (1991) 70
McPhedran, R.C., see C.A. Davis 85 (1991) 70
Meggitt, B.T., see Y.N. Ning 85 (1991) 10
Mejías, P.M., see R. Martínez-Herrero 85 (1991) 162

Menon, V.J., S. Bhattacharjee and K.K. Dey, Rectangular dielectric waveguide revisited 85 (1991) 393
Meystre, P., see Z. Białynicka-Birula 85 (1991) 315
Mi, X., see Z. Yu 85 (1991) 63
Mi, X., see L. Zhao 85 (1991) 453
Mishra, S.R., A vector wave analysis of a Bessel beam 85 (1991) 159
Mitchell, D.J., see L. Poladian 85 (1991) 59
Morgan, R., J.D.C. Jones, P.G. Harper and J.S. Barton, Observation of secondary bend loss oscillations arising from propagation of cladding modes in buffered monomode optical fibres 85 (1991) 17
Mounier, D., see K. Mazighi 85 (1991) 232
Moya-Cessa, H., V. Bužek and P.L. Knight, Power broadening and shifts of micromaser lineshapes 85 (1991) 267
Mukhopadhyay, S., see A. Basuray 85 (1991) 167
Muller, H.G., see P.C.M. Planken 85 (1991) 31
Muller, H.G., see L.D. Noordam 85 (1991) 331

Nagasawa, N., see M. Hasuo 85 (1991) 219
Naik, D.B., see J.V. Yenagi 85 (1991) 223
Nayak, N., see G.S. Agarwal 85 (1991) 202
Nie, Y., see L. Zhao 85 (1991) 453
Ning, Y.N., K.T.V. Grattan, A.W. Palmer, B.T. Meggitt and K. Weir, A novel optical heterodyne vibration sensor scheme, preserving directional information and using a short coherence length source 85 (1991) 10
Noordam, L.D., see P.C.M. Planken 85 (1991) 31
Noordam, L.D., W. Joosen, B. Broers, A. ten Wolde, A. Lagendijk, H.B. van Linden van den Heuvell and H.G. Muller, High-power femtosecond dye-laser with tunable wavelength, pulse duration and chirp 85 (1991) 331

Ogura, I., see T. Omatsu 85 (1991) 343
Ohtsubo, J., see Y. Liu 85 (1991) 457
Omatsu, T., K. Kuroda, T. Shimura, M. Chihara, M. Itoh and I. Ogura, Time-resolved measurement of beam divergence of a copper vapor laser using saturable absorber 85 (1991) 343
Ooki, H. and J. Iwasaki, A novel type of laser scanning microscope: theoretical considerations 85 (1991) 177
Oraevsky, A.N., M.M. Clark and D.K. Bandy, Many-temperature model of a laser with dynamics 85 (1991) 360
Ostrovsky, A., see K. Mazighi 85 (1991) 232
Ozaktas, H.M., Y. Amitai and J.W. Goodman, A three-dimensional optical interconnection architecture with minimal growth rate of system size 85 (1991) 1

Palange, E. and G. Salvetti, An experimental investigation of frequency selection and control in lasers with four-mirror cavities 85 (1991) 419
Palmer, A.W., see Y.N. Ning 85 (1991) 10
Pan, C.-L., see P.-Y. Chien 85 (1991) 385
Pando Lambruschini, C.L., A semiclassical approach for two-color four-mode solid-state superfluorescence 85 (1991) 291
Papánek, J., see J. Sojka 85 (1991) 241

Pashinin, P.P., see S.A. Viznyuk 85 (1991) 254
Paul, H. and Th. Richter, Bunching and antibunching of de-excited atoms leaving a micromaser 85 (1991) 508
Pauliat, G., see C. Denz 85 (1991) 171
Penin, A.N. and K.N. Zabrodin, On the nature of noise radiation inducing degenerate parametric scattering 85 (1991) 450
Penzkofer, A., see W. Bäumler 85 (1991) 326
Peřina, J., see J. Bajer 85 (1991) 261
Pillai, P.K.C., see J. Joseph 85 (1991) 389
Planken, P.C.M., E. Snoeks, L.D. Noordam, H.G. Muller and H.B. van Linden van den Heuvell, Generation of intense sub-picosecond pulses in the mid-infrared 85 (1991) 31
Pliska, P., see W. Lukosz 85 (1991) 381
Poladian, L., A.W. Snyder and D.J. Mitchell, Spiralling spatial solitons 85 (1991) 59
Porreca, M.G., see P. Galatola 85 (1991) 95
Prasad, S., Intrinsic linewidth of a homogeneously broadened laser with arbitrary output-mirror coupling 85 (1991) 227

Reddy, B.R. and P. Venkateswarlu, Optogalvanic effect in neon hollow cathode discharge 85 (1991) 491
Renner, H., Coupling coefficients of two synchronous circular fibres with arbitrary refractive-index profiles 85 (1991) 403
Richter, P.I. and T.W. Hänsch, Diode lasers in external cavities with frequency-shifted feedback 85 (1991) 414
Richter, Th., see H. Paul 85 (1991) 508
Roosen, G., see C. Denz 85 (1991) 171
Rozhdestvensky, Yu., see D. Kosachiov 85 (1991) 209
Ryan, V., see J. Khoury 85 (1991) 5

Saldin, E.L., E.A. Schneidmiller and M.V. Yurkov, Quasi-optical theory of the FEL amplifier with a circular waveguide 85 (1991) 117
Salvetti, G., see E. Palange 85 (1991) 419
Sandoghdar, V., see M.G. Boshier 85 (1991) 355
San Miguel, M., see S. Balle 85 (1991) 104
Sautenkov, V.A., see A.M. Akulshin 85 (1991) 21
Savadatti, M.I., see J.V. Yenagi 85 (1991) 223
Schneidmiller, E.A., see E.L. Saldin 85 (1991) 117
Schumacher, E., see Z. Białynicka-Birula 85 (1991) 315
Sentis, M.L., see J.-M. Hueber 85 (1991) 237
Shaw, K.D., On the slowly varying envelope approximation in coupled-wave theory 85 (1991) 191
Sheng, Y., see L. Leclerc 85 (1991) 299
Shimura, T., see T. Omatsu 85 (1991) 343
Shinkareva, I.V., see I.M. Bel'dyugin 85 (1991) 338
Simon, D.M., see S.C. Gustafson 85 (1991) 311
Singh, J. and K. Thyagarajan, Analysis of metal clad uniaxial waveguides 85 (1991) 397
Singh, K., see J. Joseph 85 (1991) 389
Snoeks, E., see P.C.M. Planken 85 (1991) 31
Snyder, A.W., see L. Poladian 85 (1991) 59

Sojka, J. and J. Papánek, Increasing absorption optical bistability in highly concentrated dye solutions 85 (1991) 241
Sokkar, T.Z.N., Determination of the index profile of a graded index elliptical optical fiber using multiple-beam microinterferometry 85 (1991) 187
Solymar, L., see D.C. Jones 85 (1991) 372
Squicciarini, M., see R.I. Billmers 85 (1991) 26
Stegeman, G.I., see S. Aramaki 85 (1991) 527
Su, C., see S.-Y. Zhu 85 (1991) 350
Subramaniam, P.C., Co-propagation of pulses with steepening and phase modulation effects 85 (1991) 306
Sukhodol'skii, A.T., see S.A. Viznyuk 85 (1991) 254

Tang, C.L., see W.H. Loh 85 (1991) 283
Tarn, C.-W. and P.P. Banerjee, A spatio-temporal Fourier-transform approach to acousto-optic interaction of light beams with cw and pulsed ultrasonic waves 85 (1991) 481
Ten Wolde, A., see L.D. Noordam 85 (1991) 331
Thyagarajan, K., see J. Singh 85 (1991) 397
Tikhonchuk, V.T., see V.V. Eliseev 85 (1991) 520
Tombesi, P., see P. Galatola 85 (1991) 95
Torre, A., see G. Dattoli 85 (1991) 425
Torruellas, W., see S. Aramaki 85 (1991) 527
Tschudi, T., see C. Denz 85 (1991) 171

Ujda, Z., Radiation extraction four-level model of a XeCl laser 85 (1991) 54

Van Linden van den Heuvell, H.B., see P.C.M. Planken 85 (1991) 31
Van Linden van den Heuvell, H.B., see L.D. Noordam 85 (1991) 331
Vartanian, T.A., see A.M. Akulshin 85 (1991) 21
Velichansky, V.L., see A.M. Akulshin 85 (1991) 21
Vemuri, G., Experimental investigation of near threshold behavior of a dye laser with swept cavity losses 85 (1991) 36
Venkateswarlu, P., see H. Jagannath 85 (1991) 443
Venkateswarlu, P., see B.R. Reddy 85 (1991) 491
Viznyuk, S.A., P.P. Pashinin and A.T. Sukhodol'skii, Recording dynamic diffraction gratings and optical phase conjugation by light-capillary profiling of thin liquid films 85 (1991) 254

Wang, D., see L. Zhao 85 (1991) 453
Wang, L.Z., see S.-Y. Zhu 85 (1991) 350
Wang, Y.-Q., see D.-H. Yang 85 (1991) 319
Weir, K., see Y.N. Ning 85 (1991) 10
Wilkens, M., see Z. Bialynicka-Birula 85 (1991) 315
Woods, C., see J. Khoury 85 (1991) 5

Xie, J., see L. Zhao 85 (1991) 453

Yang, D.-H. and Y.-Q. Wang, The effective velocity distribution of atoms and the improvement of the accuracy for an optically pumped cesium beam frequency standard with sharp angle incidence of probing laser beam 85 (1991) 319

Yenagi, J.V., M.R. Gorbal, M.I. Savadatti and D.B. Naik, A new laser dye 85 (1991) 223
Yu, Z., X. Lu, X. Mi, Q. Jiang and P. Fu, A detailed study of the effect of laser coherence on thermal grating by a novel polarization arrangement of the incident laser beams 85 (1991) 63
Yurkov, M.V., see E.L. Saldin 85 (1991) 117

Zabrodin, K.N., see A.N. Penin 85 (1991) 450
Zahler, M., see Y. Ben-Aryeh 85 (1991) 132
Zanoni, R., see S. Aramaki 85 (1991) 527
Zel'dovich, B.Ya., see N.B. Baranova 85 (1991) 371
Zhang, D., see L. Zhao 85 (1991) 453
Zhang, J., see L. Zhao 85 (1991) 453
Zhang, X., see L. Zhao 85 (1991) 453
Zhang, Y., see S. Li 85 (1991) 365
Zhang, Y. and Y. Li, An optically implementable algorithm for convolution/correlation of long data streams 85 (1991) 473
Zhao, L., X. Mi, X. Zhang, D. Zhang, Z. Lu, Y. Nie, D. Wang, L. Hu, H. He, J. Xie and J. Zhang, Photon-gated persistent spectral hole burning in zinc-tetrabenzoporphyrin/aromatic cyanide system 85 (1991) 453
Zhao, W.Z., see W.Y. Ma 85 (1991) 408
Zhu, S.-Y., C. Su and L.Z. Wang, Higher order effect of regular pumping in lasers and masers 85 (1991) 350
Zolotarev, M.V., see I.M. Bel'dyugin 85 (1991) 338
Zozulya, A.A., see V.V. Eliseev 85 (1991) 520

Optics Communications 85 (1991) 546–550
North-Holland

OPTICS
COMMUNICATIONS

Subject Index to Volume 85

Propagation and transmission in homogeneous media

Simple grid technique to measure refractive index gradients, V. Gurfein, D. Beysens, Y. Garrabos and B. Le Neindre 85 (1991) 147
On the exact Kirchhoff and Rayleigh–Sommerfeld theories for the focusing of an infinite scalar spherical wave-field, D.C. Bertilone 85 (1991) 153
A vector wave analysis of a Bessel beam, S.R. Mishra 85 (1991) 159
Activation of $BaTiO_3$ for infrared holographic recording, K. Buse, L. Holtmann and E. Krätzig 85 (1991) 183
Co-propagation of pulses with steepening and phase modulation effects, P.C. Subramaniam 85 (1991) 306
Determination of thickness and refractive index of SiO_2 films on silicon wafers using an Abbe refractometer, W. Lukosz and P. Pliska 85 (1991) 381
Polarization discrimination of complex surfaces by laser light: theory, M.F. El-Hewie and A.K. Majumdar 85 (1991) 462

Propagation and transmission in inhomogeneous media

Beam characterization through active media, R. Martínez-Herrero and P.M. Mejías 85 (1991) 162

Optical information, image formation and analysis, optical computing

A three-dimensional optical interconnection architecture with minimal growth rate of system size, H.M. Ozaktas, Y. Amitai and J.W. Goodman 85 (1991) 1
Photorefractive time correlation motion detection, J. Khoury, V. Ryan, C. Woods and M. Cronin-Golomb 85 (1991) 5
A tristate optical logic system, A. Basuray, S. Mukhopadhyay, H.K. Ghosh and A.K. Datta 85 (1991) 167
Volume hologram multiplexing using a deterministic phase encoding method, C. Denz, G. Pauliat, G. Roosen and T. Tschudi 85 (1991) 171
A novel type of laser scanning microscope: theoretical considerations, H. Ooki and J. Iwasaki 85 (1991) 177
Activation of $BaTiO_3$ for infrared holographic recording, K. Buse, L. Holtmann and E. Krätzig 85 (1991) 183
Circular harmonic covariance filters for rotation invariant object recognition and discrimination, L. Leclerc, Y. Sheng and H.H. Arsenault 85 (1991) 299
An optical signal generator based on a triangularly phase-modulated interferometer, P.-Y. Chien and C.-L. Pan 85 (1991) 385
Spatial amplification via photorefractive two-beam coupling: real-time image processing using controllable erasure of Fourier spectrum, J. Joseph, K. Singh and P.K.C. Pillai 85 (1991) 389
An optically implementable algorithm for convolution/correlation of long data streams, Y. Zhang and Y. Li 85 (1991) 473

A spatio-temporal Fourier-transform approach to acousto-optic interaction of light beams with cw and pulsed ultrasonic waves, C.-W. Tarn and P.P. Banerjee 85 (1991) 481

Optical communications

A novel optical heterodyne vibration sensor scheme, preserving directional information and using a short coherence length source, Y.N. Ning, K.T.V. Grattan, A.W. Palmer, B.T. Meggitt and K. Weir 85 (1991) 10
Observation of secondary bend loss oscillations arising from propagation of cladding modes in buffered monomode optical fibres, R. Morgan, J.D.C. Jones, P.G. Harper and J.S. Barton 85 (1991) 17
Determination of the index profile of a graded index elliptical optical fiber using multiple-beam microinterferometry, T.Z.N. Sokkar 85 (1991) 187
On the slowly varying envelope approximation in coupled-wave theory, K.D. Shaw 85 (1991) 191
Amplifier noise jitter of two interacting solitons, T. Georges 85 (1991) 195
Co-propagation of pulses with steepening and phase modulation effects, P.C. Subramaniam 85 (1991) 306
Optical-resonator-based neural network, S.C. Gustafson, G.R. Little and D.M. Simon 85 (1991) 311
Rectangular dielectric waveguide revisited, V.J. Menon, S. Bhattacharjee and K.K. Dey 85 (1991) 393
Analysis of metal clad uniaxial waveguides, J. Singh and K. Thyagarajan 85 (1991) 397
Coupling coefficients of two synchronous circular fibres with arbitrary refractive-index profiles, H. Renner 85 (1991) 403

Atomic and molecular physics

Intensity and concentration dependence of Doppler-free resonance in selective reflection, A.M. Akulshin, A.A. Celikov, V.A. Sautenkov, T.A. Vartanian and V.L. Velichansky 85 (1991) 21
A tunable hole-burning filter for lidar applications, R.I. Billmers, J. Davis and M. Squicciarini 85 (1991) 26
Probing the dressed states of an atom interacting with a quantized field, G.S. Agarwal, R.K. Bullough and N. Nayak 85 (1991) 202
Coherent population trapping: sensitivity of an atomic system to the relative phase of exciting fields, D. Kosachiov, B. Matisov and Yu. Rozhdestvensky 85 (1991) 209
The stochastic realization shift, J.C. Camparo and P. Lambropoulos 85 (1991) 213
Power broadening and shifts of micromaser lineshapes, H. Moya-Cessa, V. Bužek and P.L. Knight 85 (1991) 267
Velocity-dependent spontaneous emission, Z. Białynicka-Birula, P. Meystre, E. Schumacher and M. Wilkens 85 (1991) 315
The effective velocity distribution of atoms and the improvement of the accuracy for an optically pumped cesium beam frequency standard with sharp angle incidence of probing laser beam, D.-H. Yang and Y.-Q. Wang 85 (1991) 319
Ultrasensitive analysis of Ru through autoionization states by a laser, W.Y. Ma, L.Q. Li, W.Z. Zhao and D.Y. Chen 85 (1991) 408
Optogalvanic effect in neon hollow cathode discharge, B.R. Reddy and P. Venkateswarlu 85 (1991) 491

Condensed matter

Optical properties and microstructure of thin silver films, C.A. Davis, D.R. McKenzie and R.C. McPhedran 85 (1991) 70

Measurement of the biexciton level width of CuCl at $k \sim 0$ with a Ti-sapphire ring laser, M. Hasuo, N. Nagasawa and T. Itoh 85 (1991) 219

Lasers

Generation of intense sub-picosecond pulses in the mid-infrared, P.C.M. Planken, E. Snoeks, L.D. Noordam, H.G. Muller and H.B. van Linden van den Heuvell 85 (1991) 31
Experimental investigation of near threshold behavior of a dye laser with swept cavity losses, G. Vemuri 85 (1991) 36
Slow passage through the laser first threshold: influence of the initial condition, T. Erneux and P. Mandel 85 (1991) 43
Misalignment sensitivity of laser-diode pumped solid-state lasers, P. Laporta and M. Brussard 85 (1991) 47
Radiation extraction four-level model of a XeCl laser, Z. Ujda 85 (1991) 54
The frequency of the emission from a laser when it is below threshold, N.B. Abraham and D.E. Chyba 85 (1991) 83
System control by variation of the squeezing phase, P. Galatola, L.A. Lugiato, M.G. Porreca, P. Tombesi and G. Leuchs 85 (1991) 95
Intensity statistics and spatial correlation functions in a noise-driven unidirectional laser amplifier, S. Balle, F. De Pasquale, M. San Miguel and N.B. Abraham 85 (1991) 104
A new laser dye, J.V. Yenagi, M.R. Gorbal, M.I. Savadatti and D.B. Naik 85 (1991) 223
Intrinsic linewidth of a homogeneously broadened laser with arbitrary output-mirror coupling, S. Prasad 85 (1991) 227
Active mode-locked operation of a diode pumped colour-centre laser, K. Mazighi, J.L. Doualan, J. Hamel, J. Margerie, D. Mounier and A. Ostrovsky 85 (1991) 232
Small volume long pulse X-ray preionized XeCl laser with double discharge and fast ferrite magnetic switch, J.-M. Hueber, B.L. Fontaine, P.C. Delaporte, B.M. Forestier and M.L. Sentis 85 (1991) 237
Quantum noise of lasers with multi-photon absorption and reduced pump noise, U. Herzog 85 (1991) 275
Succesive higher-harmonic bifurcations of a polarization self-modulated external cavity, W.H. Loh and C.L. Tang 85 (1991) 283
Measurement of background energy content of a linear cw colliding pulse mode-locked dye laser, W. Bäumler and A. Penzkofer 85 (1991) 326
High-power femtosecond dye-laser with tunable wavelength, pulse duration and chirp, L.D. Noordam, W. Joosen, B. Broers, A. ten Wolde, A. Lagendijk, H.B. van Linden van den Heuvell and H.G. Muller 85 (1991) 331
Phase-locking of optically coupled lasers in the presence of resonant frequency spread and external noise, I.M. Bel'dyugin, M.V. Zolotarev and I.V. Shinkareva 85 (1991) 338
Time-resolved measurement of beam divergence of a copper vapor laser using saturable absorber, T. Omatsu, K. Kuroda, T. Shimura, M. Chihara, M. Itoh and I. Ogura 85 (1991) 343
Higher order effect of regular pumping in lasers and masers, S.-Y. Zhu, C. Su and L.Z. Wang 85 (1991) 350
External-cavity frequency-stabilization of visible and infrared semiconductor lasers for high resolution spectroscopy, M.G. Boshier, D. Berkeland, E.A. Hinds and V. Sandoghdar 85 (1991) 355
Many-temperature model of a laser with dynamics, A.N. Oraevsky, M.M. Clark and D.K. Bandy 85 (1991) 360
Diode lasers in external cavities with frequency-shifted feedback, P.I. Richter and T.W. Hänsch 85 (1991) 414

An experimental investigation of frequency selection and control in lasers with four-mirror cavities, E. Palange and G. Salvetti 85 (1991) 419
A simple analysis of the MOPA FEL Stanford experiment, G. Dattoli, H. Fang, L. Giannessi and A. Torre 85 (1991) 425
Coupling between free propagating and guided modes in a hybrid resonator for a waveguide free electron laser, A. Doria and G.P. Gallerano 85 (1991) 500
Bunching and antibunching of de-excited atoms leaving a micromaser, H. Paul and Th. Richter 85 (1991) 508

Nonlinear optics

Spiralling spatial solitons, L. Poladian, A.W. Snyder and D.J. Mitchell 85 (1991) 59
A detailed study of the effect of laser coherence on thermal grating by a novel polarization arrangement of the incident laser beams, Z. Yu, X. Lu, X. Mi, Q. Jiang and P. Fu 85 (1991) 63
Quasi-optical theory of the FEL amplifier with a circular waveguide, E.L. Saldin, E.A. Schneidmiller and M.V. Yurkov 85 (1991) 117
The effects of the beam splitters on the quantum detection properties of the nonlinear Mach–Zender interferometer, Y. Ben-Aryeh and M. Zahler 85 (1991) 132
Probing the dressed states of an atom interacting with a quantized field, G.S. Agarwal, R.K. Bullough and N. Nayak 85 (1991) 202
Increasing absorption optical bistability in highly concentrated dye solutions, J. Sojka and J. Papánek 85 (1991) 241
Cerenkov-type phase-matched second-harmonic generation in DCANP Langmuir-Blodgett film waveguides, Ch. Bosshard, M. Flörsheimer, M. Küpfer and P. Günter 85 (1991) 247
Recording dynamic diffraction gratings and optical phase conjugation by light-capillary profiling of thin liquid films, S.A. Viznyuk, P.P. Pashinin and A.T. Sukhodol'skii 85 (1991) 254
Quantum statistical properties of optical phase conjugation, J. Bajer and J. Peřina 85 (1991) 261
A semiclassical approach for two-color four-mode solid-state superfluorescence, C.L. Pando Lambruschini 85 (1991) 291
Conditions for operating a lossy nonlinear Fabry-Perot etalon as an optical amplifier, S. Li and Y. Zhang 85 (1991) 365
Comments on "Polar asymmetry of photoionization by a field with $\langle E^3 \rangle \neq 0$. Theory and experiment" [N.B. Baranova, A.N. Chudinov and B.Ya. Zel'dovich, Optics Comm. 79 (1990) 116], N.M. Lawandy 85 (1991) 369
Reply to comments on "Polar asymmetry of photoionization by a field with $\langle E^3 \rangle \neq 0$. Theory and experiment", N.B. Baranova, A.N. Chudinov and B.Ya. Zel'dovich 85 (1991) 371
Transient response of photorefractive bismuth silicon oxide in the pulsed regime, D.C. Jones and L. Solymar 85 (1991) 372
Spatial amplification via photorefractive two-beam coupling: real-time image processing using controllable erasure of Fourier spectrum, J. Joseph, K. Singh and P.K.C. Pillai 85 (1991) 389
All-optical logic gates based on cross-phase modulation in a nonlinear fiber interferometer, J.-M. Jeong and M.E. Marhic 85 (1991) 430
Ab-initio calculation of nonlinear optical properties of GaAs, H. Ma, S.T. Chui, R.V. Kasowski and W.Y. Hsu 85 (1991) 437
External seeding in double phase conjugate mirror, H. Jagannath and P. Venkateswarlu 85 (1991) 443
On the nature of noise radiation inducing degenerate parametric scattering, A.N. Penin and K.N. Zabrodin 85 (1991) 450
Photon-gated persistent spectral hole burning in zinc-tetrabenzoporphyrin/aromatic cy-

anide system, L. Zhao, X. Mi, X. Zhang, D. Zhang, Z. Lu, Y. Nie, D. Wang, L. Hu, H. He, J. Xie and J. Zhang 85 (1991) 453
Observation of higher harmonic bifurcations in chaotic system using a laser diode active interferometer, Y. Liu and J. Ohtsubo 85 (1991) 457
One-mirror self-pumped phase conjugator: three-dimensional analysis, V.V. Eliseev, V.T. Tikhonchuk and A.A. Zozulya 85 (1991) 520
Tunable third harmonic genereation of trans-β-carotene, S. Aramaki, W. Torruellas, R. Zanoni and G.I. Stegeman 85 (1991) 527